UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/049,676	03/27/98	KRISHNASWAMY S	70970019-1

TM02/0212

HEWLETT PACKARD COMPANY
LEGAL DEPT 20BN
PO BOX 10301
PALO ALTO CA 94303-0890

EXAMINER	
CARDONE, J	
ART UNIT	**PAPER NUMBER**
2152	7

DATE MAILED: 02/12/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/049,676	Applicant(s) Krishnaswamy et al.
	Examiner Jason D. Cardone	Group Art Unit 2152

☒ Responsive to communication(s) filed on *Nov 20, 2000* .

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-34* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-34* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Response to Reconsideration

1. This action is responsive to the response of the applicants (Paper No. 5) filed on 11/20/00. Claims 1-34 are presented for further examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choquier et al. "Choquier", U.S. Patent No. 5,774,668, in view of Pearson, U.S. Patent No. 5,903,754.

4. Regarding claim 1, Choquier discloses a method for transferring messages among an application program and a plurality of protocol layers in a communication subsystem of a computer using a communication subsystem controller, the computer being connected to a communication network and having a memory and at least one processor [Choquier, col. 1, line 41 - col. 2, line 65, col. 5, lines 9-65, col. 7, line 64 - col. 8, line 63, col. 12, lines 5-54, and col. 18, lines 9-67], the method comprising the steps of:

enabling an adjacent protocol layer to the application program to be an application service provider in response to the application program [Choquier, col. 12, line 6 - col. 13, line 38];

enabling a first protocol layer in the pair of adjacent protocol layers in the protocol stack to be a protocol service provider in response to a second protocol layer in the pair of adjacent protocol layers in the protocol stack [Choquier, col. 13, lines 4-34 and col. 18, lines 10-54];

transferring messages between the application program and the application service provider, further including the steps of:

transferring messages between the application program and the communication subsystem controller [Choquier, col. 13, lines 4-34 and col. 18, lines 10-54], and

transferring messages between the communication subsystem controller and the application service provider [Choquier, col. 13, lines 4-34 and col. 18, lines 10-54]; and

transferring messages between the second protocol layer and the protocol service provider, further including the steps of:

transferring messages between the second protocol layer and the communication subsystem controller [Choquier, col. 12, line 6 - col. 13, line 38], and

transferring messages between the communication subsystem controller and the protocol service provider [Choquier, col. 12, line 6 - col. 13, line 38].

5. Choquier does not specifically disclose building the protocol stack in such detail as using the plurality of protocol layers and the communication subsystem controller, wherein the communication subsystem controller forms interfaces between the application program and its adjacent protocol layer in the protocol stack and at least between a pair of adjacent protocol layers in the protocol stack for transferring messages. However, Pearson, in the same field of

endeavor, discloses building a protocol stack using the plurality of protocol layers and the communication subsystem controller, wherein the communication subsystem controller forms interfaces between the application program and its adjacent protocol layer in the protocol stack and at least between a pair of adjacent protocol layers in the protocol stack for transferring messages [Pearson, col. 4, line 45 - col. 5, line 49, col. 6, line 47 - col. 7, line 67, and col. 9, line 38 - col. 9, line 65]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the detailed protocol stack, shown by Pearson, in to the gateway system, taught by Choquier, in order to easily disclosed the relationship of the layers. One of ordinary skill in the art would have been motivated to modify Choquier to include the detailed protocol stack in view of Pearson, so that a user could replicate the stack easily.

Therefore, it would have been obvious to combine Choquier and Pearson (Choquier-Pearson) to obtain the invention as specified in claim 1.

6. Regarding claim 2, Choquier-Pearson further discloses the step of building the protocol stack using the plurality of protocol layers and the communication subsystem controller further includes the step of building the protocol stack according to a set of predetermined protocol stack information stored in the memory, wherein the set of predetermined protocol stack information includes at least information of the adjacent protocol layer to the application program and the pair of adjacent protocol layers in the protocol stack [Choquier, col. 13, lines 4-34 and col. 18, lines 10-54] [Pearson, col. 4, line 45 - col. 5, line 49, col. 6, line 47 - col. 7, line 67, and col. 9, line 38 - col. 9, line 65].

7. Regarding claim 3, Choquier-Pearson further discloses the step of building the protocol stack using the plurality of protocol layers and the communication subsystem controller further includes the step of storing a set of service access point information in the memory, wherein the set of service access point information includes at least information of service access points used by the adjacent protocol layer to the application program and the pair of adjacent protocol layers in the protocol stack for transferring messages [Choquier, col. 10, lines 20-65, col. 13, lines 4-34 and col. 18, lines 10-54] [Pearson, col. 6, line 47 - col. 7, line 67, and col. 9, line 38 - col. 9, line 65].

8. Regarding claim 4, Choquier-Pearson further discloses the step of storing the set of service access point information in the memory further includes storing the set of service access point, information in a persistent storage for restoring the protocol stack during recovery activities [Choquier, col. 10, lines 20-65, col. 13, lines 4-34 and col. 18, lines 10-54] [Pearson, col. 6, line 47 - col. 7, line 67, and col. 9, line 38 - col. 9, line 65].

9. Regarding claim 5, Choquier-Pearson further discloses the step of transferring messages between the application program and the application service provider further includes the step of transferring messages between the application program and the application service provider using a service access point according to the set of service access point information stored in the memory [Choquier, col. 12, line 6 - col. 13, line 38] [Pearson, col. 6, line 47 - col. 7, line 67, and col. 9, line 38 - col. 9, line 65].

10. Regarding claim 6, Choquier-Pearson further discloses the step of transferring messages between the second protocol layer and the protocol service provider further includes the step of transferring messages between the second protocol layer and the protocol service provider using a service access point according to the set of service access point information stored in the memory [Choquier, col. 12, line 6 - col. 13, line 38] [Pearson, col. 6, line 47 - col. 7, line 67, and col. 9, line 38 - col. 9, line 65].

11. Regarding claim 7, Choquier-Pearson further discloses the step of building the protocol stack using the plurality of protocol layers and the communication subsystem controller further includes the step of building the protocol stack using a preselected stack of network-dependent protocol layers, wherein the preselected stack of network-dependent protocol layers provide network dependent services to the protocol stack for connecting the computer to the communication network [ie. ISDN, X25, Choquier, col. 4, line 55 - col. 5, line 30] [Pearson, col. 8, lines 20-60].

12. Regarding claim 8, Choquier-Pearson further discloses the step of building the protocol stack using the preselected stack of network-dependent protocol layers further includes the step of providing an adapter layer between the preselected stack of network-dependent protocol layers and its adjacent protocol layer in the protocol stack for transferring messages between the preselected stack of network-dependent protocol layers and its adjacent protocol layer in the protocol stack [ie. ISDN, X25, Choquier, col. 4, line 55 - col. 5, line 30] [Pearson, col. 8, lines 20-60].

13. Regarding claim 9, Choquier-Pearson further discloses the step of building the protocol stack using the preselected stack of network-dependent protocol layer further includes the step of building the protocol stack with the communication subsystem controller forming an interface between the adjacent protocol layer to the preselected stack of network-dependent protocol layers and the adapter layer for transferring messages [ie. ISDN, X25, Choquier, col. 4, line 55 - col. 5, line 30] [Pearson, col. 8, lines 20-60].

14. Regarding claim 10, Choquier-Pearson further discloses the step of transferring messages between the preselected stack of network-dependent layers and its adjacent protocol layer, further including the steps of: transferring messages between the adjacent protocol layer to the preselected stack of network-dependent protocol layers and the communication subsystem controller, transferring messages between the communication subsystem controller and the adapter layer, and transferring messages between the adapter layer and the preselected stack of network-dependent protocol layers [Choquier, col. 4, line 55 - col. 5, line 30, col. 7, line 64 - col. 8, line 63, col. 12, lines 5-54, and col. 18, lines 9-67] [Pearson, col. 8, lines 20-60].

15. Regarding claim 11, Choquier-Pearson further discloses the step of using multi-threading for enabling the computer to process messages in the protocol layers in the protocol stack [Choquier, col. 16, lines 10-67] [Pearson, col. 12, line 43 - col. 13, line 15].

16. Regarding claim 12, Choquier-Pearson further discloses the step of transferring messages between the second protocol layer and the protocol service provider further includes the step of providing recovery information to the communication subsystem controller during the transfer of messages from one of the second protocol layer and the protocol service provider to the communication subsystem controller [Choquier, col. 12, line 6 - col. 13, line 38] [Pearson, col. 6, line 47 - col. 7, line 67, and col. 9, line 38 - col. 9, line 65].

17. Regarding claim 13, Choquier-Pearson further discloses the step of transferring messages between the application program and the application service provider further includes the step of providing recovery information to the communication subsystem controller during the transfer of messages from the application service provider to the communication subsystem controller [Choquier, col. 12, line 6 - col. 13, line 38] [Pearson, col. 9, line 38 - col. 9, line 65].

18. Regarding claim 14, Choquier-Pearson further discloses the step of storing the recovery information in a persistent storage for resuming the transfer of messages during recovery activities [Choquier, col. 12, line 6 - col. 13, line 38] [Pearson, col. 6, line 47 - col. 7, line 67, and col. 9, line 38 - col. 9, line 65].

19. Regarding claims 15-34, claims 15-34 have similar limitations as claims 1-14. Therefore, they are rejected under Choquier-Pearson for the same reasons set forth in the rejection of claims 1-14 [Supra 1-14].

Response to Arguments

20. Applicant's arguments filed 11/20/00 have been fully considered but they are not persuasive. In the remarks, Applicant argued in substance that:

21. (A) No motivation to combine Choquier and Pearson.

As to point (A), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 19880; *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the invention of Pearson complements the invention of Choquier use of layers within a protocol stack within a computer. The invention of Pearson has a more insight to some of the layers to strengthen the teachings of Choquier. Therefore, the combination of Choquier and Pearson gives the user easier understand (replication) of the layers within a stack.

22. (B) Choquier discloses limitations in claims 1 and 15 within the client and the gateway.

As to point (B), during patent examination and prosecution, claims must be given their broadest reasonable interpretation. *In re Van Geuns*, 988 F.2d 1181, 1184, 26 USPQ2d

1057, 1059 (Fed. Cir. 1993); *In re Prater*, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969). Choquier does disclose the limitations through the protocol stacks of the client and the server. The passages given to show the interaction of the layers within the client also had citations of the gateway involved with the transactions between the client and server. The client in the invention of Choquier was selected to read upon the applicants' claimed invention, given their broadest reasonable interpretation.

Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CAR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CAR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason D. Cardone, whose telephone number is (703) 305-8484 and fax number is (703) 308-9052. The examiner can normally be reached on Monday through Thursday from 9:00am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist, whose telephone number is (703) 305-9700.

MARK H. RINEHART
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Jason D. Cardone

February 8, 2001